Release Notes - ASAP CRN Cloud - Version 0.0.1

Release Date: November 10, 2023

Overview:

We're excited to announce the availability of the Version 0.0.1 data release on the CRN Cloud! In this release, we have launched the platform with data contributions from Teams Hafler and Lee. Furthermore, we've created a Postmortem-derived Brain Sequencing Collection by integrating these teams' data into a harmonized subset. This curated subset contains data from a total of 2 CRN Teams and is organized across cell ranger data.

Users can create an account and establish a Data Use Agreement (DUA) for access to the latest data on the platform. Use this link to access: https://cloud.parkinsonsroadmap.org/.

The current version of CRN Cloud is in its ***beta release***. Expect the rollout of new data and features in the coming months, designed to improve analysis capabilities and integration with Verily Workbench.

Version 0.0.1 - Release Updates:

Additions:

- <u>Initial data collections added:</u> Postmortem-derived Brain Sequencing Collection, Team Hafler, Team Lee.
  - A DOI has been generated for this release. It is https://doi.org/10.5281/zenodo.8384743. Reference the harmonized collection in your publication by citing the DOI. The DOI is also available on the 'Overview' tab in the collection.

- <u>Features available:</u>
  - Review dataset descriptions, data generation and curation methods, and data structure details.
  - Browse, filter, and download metadata in Explorer.
  - Analyze raw, preprocessed, and curated data in GCP and/or Verily Workbench.

- <u>Documentation available:</u>
  - User Manual
  - Data Dictionary
  - File Manifest
  - GitHub
  - Sample notebooks (Python, R), additional documentation and guides are available in Verily Workbench.

Available Data:

Data available in this release:

1. **Postmortem-derived Brain Sequencing Collection:** a harmonized collection of sequencing data contributed by two ASAP CRN teams (Teams Hafler, Lee). Click here for more details.

2. **(Team Hafler) Single-cell transcriptomic and proteomic analysis of Parkinson's disease brains:** Click here for more details.

3. **(Team Lee) Investigating Senescence in Human PD Brain snRNA-seq:** Click here for more details.

The current data collections represent the minimum viable product and are being expanded as additional data is uploaded into the CRN Cloud. When complete, the collection will provide data generated from 1,800+ samples using proteomics, transcriptomics, and sequencing (single-nucleus RNAseq, single-cell RNAseq, bulk RNA-seq, ATAC-seq, long read WGS, and single-nucleus multiome sequencing (paired snRNAseq, snATACseq)) techniques.

Feedback and Support:

If you have any feedback or questions regarding this release or the CRN Cloud platform in general, please feel free to reach out to us at cloud@parkinsonsroadmap.org. We are more than happy to address your inquiries and can arrange a call if needed!